

UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF NORTH CAROLINA  
ASHEVILLE DIVISION

STATE OF NORTH CAROLINA	)	
ex rel. Roy Cooper, Attorney	)	
General,	)	
Plaintiff,	)	No. 1:06-CV-20
	)	
vs.	)	<b>VOLUME 12</b>
	)	
TENNESSEE VALLEY AUTHORITY,	)	[Page 2844-2907]
	)	
Defendant.	)	
_____	)	

TRANSCRIPT OF TRIAL PROCEEDINGS  
BEFORE THE HONORABLE LACY H. THORNBURG  
UNITED STATES DISTRICT COURT JUDGE  
JULY 30, 2008

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## P R O C E E D I N G S

**THE COURT:** Are we ready to proceed?

Mr. Gulick?

**MR. GULICK:** Thank you, Your Honor. If I may approach, we have some exhibits and I've got an exhibit book.

**THE COURT:** All right, sir.

**MR. GULICK:** May it please the Court, I'm James Gulick, and I will make the closing argument for the State of North Carolina. And I'll start, and I would like to reserve the balance of the time I've got left for rebuttal, if necessary.

**THE COURT:** All right.

**MR. GULICK:** Your Honor, the State of North Carolina has presented evidence in the last two weeks, and you've heard all of the evidence from both parties, and this has demonstrated that TVA's emissions of sulfur dioxide and NOx are creating and have created a nuisance which is going on today under the laws of Tennessee, Alabama and Kentucky, and that nuisance is occurring not only in North Carolina, and especially in western North Carolina, but in the states of Alabama, Tennessee and Kentucky. And, indeed, those emissions are causing harm to public health throughout the region, especially in the eastern part of the United States.

The common law of Tennessee, Alabama, and Kentucky all establish that air pollution can constitute a public

1 nuisance, and injunctive relief is an appropriate remedy for  
2 that nuisance.

3 Under the laws of all of these states, as well as  
4 under the *Restatement of Torts*, unreasonableness of the  
5 conduct can be viewed in terms of the aggregate nuisance  
6 resulting from the combination or contributions of all.

7 The evidence has clearly established that the  
8 emissions from TVA's facilities in Alabama and Tennessee and  
9 Kentucky all aggregate together to cause the harm that they  
10 do in North Carolina, in Tennessee, in Alabama, and Kentucky,  
11 as well as throughout the region.

12 The laws in all these states, Your Honor, make it  
13 clear that there is liability if the aggregate effect is  
14 substantial and there is unreasonable interference, and all  
15 North Carolina is asking of TVA is that it remove its  
16 contribution to the nuisance.

17 The testimony of James Staudt established that  
18 TVA's facilities are emitting at an unreasonable rate in view  
19 of the available technology which is proven by which they can  
20 further reduce their emissions to a reasonable level. The  
21 necessity and feasibility of these controls is well  
22 established by his testimony. Indeed, TVA has offered no  
23 expert testimony whatsoever that contradicts his estimate,  
24 based upon a very close examination of the availability of  
25 labor and the cost, that these can be done by 2013.

1           Moreover, the testimony of Susan Tierney,  
2 Dr. Tierney, establishes without question that TVA can afford  
3 to implement these controls without reasonably disrupting its  
4 rates. There was no contrary expert testimony offered.

5           The evidence establishes, Your Honor, through  
6 numerous witnesses and through numerous exhibits that have  
7 been admitted through the testimony of Staudt and Neil  
8 Wheeler and Lyle Chinkin, the SAMI evidence that you saw on  
9 the first day of trial, and, indeed, in Exhibit 5A that was  
10 presented by Dr. Anderson, during her cross-examination,  
11 that's in her report, that TVA's emissions from each of the  
12 states involved, from Alabama, Kentucky, and Tennessee,  
13 contribute to the poor air quality in western North Carolina,  
14 as well as in those states and throughout the region.

15           And, furthermore, although nonattainment of the  
16 imperfect federal National Ambient Air Quality Standards is  
17 not the judgment, is not the prerequisite for harm, the  
18 evidence clearly establishes that even today there are  
19 nonattainment of ozone and other standards in these states.

20           Indeed, if you look at Plaintiff's Exhibit 149,  
21 which summarizes the improvement in annual PM2.5, or fine  
22 particulate, concentrations, you can see that there are  
23 significant areas of nonattainment in and around Bull Run, in  
24 and around Chattanooga, as well as in western North Carolina,  
25 and you can see the benefits that will accrue to western

1 North Carolina and eastern Tennessee, and Kentucky, and  
2 Alabama if TVA implements the controls that North Carolina  
3 seeks.

4           Our Exhibit 156, which is now on your screen, shows  
5 the maximum improvement in 8-hour ozone concentrations with  
6 the additional controls North Carolina seeks. This reveals  
7 very clearly that there will be benefits along the Appalachian  
8 Trail, along the Blue Ridge Parkway, near the Chattanooga  
9 nonattainment area, which is close to Widows Creek in  
10 northern Alabama, and an extensive area where there is  
11 uncontrolled emissions from John Sevier and on which TVA  
12 proposes at some future time to install the latest proven  
13 controls for controlling NOx emissions that result in ozone.

14           These are all substantial harms to air quality  
15 which TVA can rectify in the near future using proven  
16 controls.

17           Your Honor, looking at Plaintiff's Exhibit 155,  
18 which is now shown on your screen, you can see the  
19 significant number of nonattainment areas for ozone -- and  
20 this is using the old standard that has now been replaced,  
21 the old 8-hour ozone standard -- that is taking place. You  
22 can see -- on this screen you can see nonattainment near  
23 Memphis. You can see nonattainment area just north of  
24 Cumberland and Gallatin plants in Kentucky, and you can see  
25 nonattainment areas right around Nashville, where the

1 Gallatin plant is.

2           You've heard testimony that TVA, notwithstanding  
3 these long-standing nonattainment areas, that TVA has not  
4 installed the most modern controls for either of the  
5 Johnsonville plant or the Gallatin plant, although ten years  
6 ago in, 1998, they did their own study showing the  
7 significant impact of those plants' emissions on  
8 nonattainment in the Nashville area, and you continue to see  
9 a long strip of nonattainment running from where Widows Creek  
10 is, down near Chattanooga, up into the Bull Run and the  
11 Kingston area.

12           Your Honor, the laws of these three states  
13 establish that conduct which significantly interferes with  
14 public health or safety or comfort constitutes a public  
15 nuisance.

16           The testimony of Dr. Jonathan Levy of the Harvard  
17 School of Public Health and Dr. Peden of the UNC Medical  
18 School and the Center for Environmental Research at that  
19 school clearly establish, first of all, the causal link  
20 between exposure to fine particulates and to ozone to adverse  
21 human health consequences.

22           Dr. Moolgavkar and Dr. Anderson, TVA's experts, are  
23 clearly representing a distinct minority view, industry's  
24 view, about that evidence, but there in the clear --  
25 Dr. Moolgavkar's own testimony establishes that he is in the

1 distinct minority on that subject.

2 Dr. Levy used well-established peer-reviewed  
3 techniques of estimating the benefits that could be achieved  
4 in public health by installing the controls that North  
5 Carolina seeks, and they are very substantial in North  
6 Carolina, Tennessee, Alabama, and Kentucky, as well as the  
7 rest of the region.

8 There are many other health effects that do not  
9 result in premature mortality. They were established by the  
10 testimony of Dr. Peden, but they were amplified by the  
11 testimony that you heard from Dr. Russell about the  
12 significance and disruption in human being's lives with  
13 asthma exacerbations, a very large number of which can be  
14 avoided as a result of the controls that North Carolina  
15 seeks, and the disruption of people's lives to have to adjust  
16 their daily activities to avoid breathing polluted air.

17 And you heard more personal testimony from Will  
18 Harlan and Morgan Sommerville about their experiences and how  
19 they've had to modify either their work schedules or their  
20 exercise schedules to avoid this kind of thing, to avoid the  
21 adverse impacts of air pollution.

22 You heard from Erik Plakanis from Tennessee, who  
23 just very recently had to cancel a trip up onto the  
24 Applachian Trail because of the high ozone levels on that  
25 trail.



1 Dr. Levy's estimates, working with his colleague,  
2 Dr. Spengler, has estimated a very substantial number of  
3 premature mortalities, hospital admissions, emergency room  
4 visits, asthma exacerbations, and restricted activities that  
5 will be avoided in North Carolina, in Kentucky, in Alabama,  
6 and Tennessee, as well as throughout the region if these  
7 controls are installed. And those benefits will accrue very  
8 quickly upon the -- upon those controls being installed.

9 It's interesting to note that the benefits in  
10 Tennessee actually are greater than anywhere else,  
11 substantiating SAMI's finding that the state in which the  
12 benefits -- in which the reductions are made will see the  
13 greatest benefits. But those benefits will be realized  
14 outside those states as well, another finding of SAMI, which  
15 is supported by all of the other evidence that follows.

16 North Carolina's expert economist, using EPA's  
17 proven techniques which have not been disturbed by later  
18 scientific testimony, established that there are very  
19 substantial monetary benefits associated with the quantified  
20 health benefits.

21 As you can see on the screen before you, in  
22 Tennessee, North Carolina, Alabama, and Kentucky alone, using  
23 2000 census data, which is already conservative and behind  
24 the times, there will be monetized benefits that help -- just  
25 of the quantified health benefits of nearly \$3 billion a

1 year. If you use 2013 population figures, it is probably  
2 going to add an additional half a billion dollars to those  
3 annual health benefits.

4 In addition to public health -- and I would like to  
5 mention one thing. There are many unqualified health  
6 benefits, and one I would like to specifically mention, Your  
7 Honor, is one that Dr. Peden mentioned in his testimony, and  
8 that is that the evidence now shows that there is a  
9 significant loss in lung development in children who are  
10 exposed to chronic -- who have chronic ozone exposure. That  
11 is not quantified in any of these benefits, but that's a  
12 serious impact on the lives of young people.

13 And Dr. Peden also testified that the data do not  
14 support the suggestion made yesterday by Dr. Smith that the  
15 premature mortalities are simply people who are going to die  
16 soon anyway. And as Dr. Smith herself recognized, her view  
17 on that has not been accepted by the advisors to the EPA in  
18 valuing of human life.

19 In addition to the health benefits, Your Honor,  
20 there is substantial environmental benefits as well. Most  
21 visibly, of course, is the regional haze. And you've heard  
22 testimony from numerous witnesses about the value that people  
23 place on visibility, on improving visibility. You heard it  
24 from many people, testimony from people in this area, such as  
25 Harris Prevost, from Bill Cecil and Todd Morse, as well as

1 from Erik Plakanis.

2           Harris Prevost testified that he has witnessed on  
3 numerous occasions that when there is a beautiful view in  
4 which you can see ridge after ridge from the top of  
5 Grandfather Mountain it's like a spiritual experience for  
6 people. They stay, they don't leave; they just soak it in.  
7 And when there is haze, a veil is down over that, that the  
8 spiritual experience is lost.

9           You heard from Leah Mathews, who did for the park  
10 service an economic valuation of improved visibility just on  
11 the Blue Ridge Parkway and a very substantial dollar value  
12 that the users of the Blue Ridge Parkway placed on improving  
13 visibility along the Parkway.

14           John Molenaar's testimony established that the  
15 visibility improvements will be widespread in western North  
16 Carolina, and although his figure only shows the minimum, he  
17 says at least 40 days perceptible visibility improvements in  
18 the area that he has highlighted, which includes many of the  
19 areas of concern in western North Carolina.

20           It's very clear from the testimony of others, as  
21 well as from him, that those benefits will be realized in  
22 eastern Tennessee and at Mammoth Cave, which has the worst  
23 visibility of any Class I area in the United States, and  
24 Sipsey Wilderness in Alabama.

25           Your Honor has also heard testimony about the

1 longstanding problem of acid deposition on the high forest  
2 mountains in North Carolina and Tennessee and the damage that  
3 it's done to their soils. This testimony came not only from  
4 our expert Charles Driscoll, but from Bill Jackson of the  
5 U.S. Forest Service. And their combined view was that,  
6 although it's going to take some time for the soils to  
7 recover and for the streams to recover their acid  
8 neutralizing capacity, that that will not happen until deep  
9 cuts are made in the emissions, especially of sulfur dioxide,  
10 but also of nitrates.

11           The suggestion by Dr. Grigal, TVA's expert, that  
12 these areas are already ruined and so we might as well get  
13 used to it is really -- it's terrible. I don't know what to  
14 say about it. Especially coming from TVA, which has  
15 contributed so much to this problem in eastern Tennessee and  
16 western North Carolina.

17           Furthermore, although the contribution cannot be  
18 quantified, TVA's emissions also include mercury, just as  
19 they would with any other utility, and that mercury can be --  
20 mercury emissions can be reduced significantly by the  
21 controls that North Carolina seeks. The fact that those  
22 emissions can be reduced is not disputed by anybody.

23           The law of all these states provides, as does the  
24 *Restatement of Torts*, that conduct which is proscribed by  
25 statute, ordinance, or administrative regulation goes to the

1 unreasonable of that conduct. And you heard the  
2 testimony of the former EPA's former Air Enforcement  
3 Director, Bruce Buckheit, about what he described as the  
4 stunning number and magnitude of TVA's violations of the New  
5 Source Review provisions of the Clean Air Act, and he  
6 described what those violations were and about EPA's efforts  
7 to deal with those violations, which were stymied by TVA's  
8 resistance, and a ruling by the Eleventh Circuit that the  
9 current administration's policy that while TVA can sue EPA,  
10 EPA cannot sue TVA.

11           So, once again, North Carolina is without the  
12 protection of the federal government's regulations and  
13 statutes. But the Court does not have to ignore those  
14 violations.

15           I thought it was very interesting that when Gordon  
16 Park testified for TVA and was asked about it by TVA's own  
17 counsel he did not deny the underlying violations. His  
18 response was no court has issued a final adjudication finding  
19 us responsible.

20           Moreover, it is well established by a court  
21 decision that TVA has committed 3,000 opacity violations at  
22 its Colbert facility in northern Alabama in just a matter of  
23 two to three years.

24           Furthermore, TVA was fined in Alabama \$100,000 for  
25 other violations. And TVA's own Inspector General indicated

1 in his report, which is now in evidence before you, that TVA  
2 did not exhibit a standard of care commensurate with  
3 applicable regulatory requirements.

4           Your Honor, TVA has known for years about the  
5 nature and level of impact that results from its emissions.  
6 It's not alone. Other utilities are the same. But TVA has  
7 known. Indeed, TVA knew at the outset of the SAMI  
8 investigations -- the SAMI investigations were not undertaken  
9 in 1992 to find out whether there was acid deposition or  
10 whether there was regional haze. The question was, where is  
11 it coming from and what can we do about it. It took ten  
12 years of evaluation to reach those conclusions, and the  
13 result was pretty clear as a result of that final report that  
14 utilities need to remove -- need to drastically reduce their  
15 sulfur dioxide and oxide of nitrogen emissions. That's the  
16 first big step. They're the ones who emit, by far, the most  
17 sulfur dioxide and the biggest reductions have to come from  
18 them.

19           North Carolina heard that message and required its  
20 two utilities to make drastic reductions on a firm schedule,  
21 and the evidence before you shows that Duke and Progress,  
22 which, as the evidence clearly shows, had not installed a  
23 single scrubber in 2002 of their own volition or under the  
24 acid rain amendments of the federal Clean Air Act, the  
25 evidence before you clearly establishes that with a firm

1 schedule and deadline, without loopholes, that they have  
2 installed in three years -- the past three years, more --  
3 scrubbed more capacity than TVA has done in 35 years. And  
4 TVA's witness, Mr. Myers, admitted that very fact.

5           TVA's 1998 ozone report established that in 1998  
6 TVA knew that its emissions of oxides of nitrogen from its  
7 Gallatin, Cumberland, Johnsonville plants were having a  
8 substantial impact on ozone levels in the Nashville  
9 nonattainment area.

10           Your Honor, these are big projects and it will cost  
11 a lot of money in ordinary people's terms for them to install  
12 the controls that are sought, but they're not unreasonable.  
13 As Jim Staudt testified, this is what you expect to have to  
14 pay, this is what industry, what utilities are in fact paying  
15 in order to install pollution controls.

16           TVA's own exhibit and Dr. Staudt's own testimony  
17 establish that these controls can be installed not in the  
18 manner of billions of dollars a year, but under a billion  
19 dollars a year. North Carolina's evidence establishes that  
20 for \$516 million a year, TVA can install these controls. And  
21 we have before you -- that can be broken out by state by  
22 TVA's facilities in Alabama, Kentucky, and Tennessee.

23           And that doesn't take into consideration the fuel  
24 cost savings that TVA can realize if it installs pollution  
25 controls, the more advanced pollution controls, on its

1 facilities. Both James Staudt and TVA's witness Michael  
2 Scott testified about the fact that there are cost savings  
3 that can be had if you install the most advanced controls.

4           Your Honor, the health benefits that can be  
5 realized, just the quantified health benefits, of 3 billion  
6 or 3 and a half billion, depending on what population figures  
7 you consider, dwarf by comparison -- those are annual  
8 benefits -- dwarf by comparison the annual cost to TVA in  
9 installing the controls that North Carolina seeks. And  
10 that's without considering any of the unquantified benefits,  
11 and that's without considering any of the quantified health  
12 benefits that will occur outside of Tennessee, North  
13 Carolina, Alabama, and Kentucky.

14           The evidence establishes that these pollution  
15 controls are reasonable, they're necessary, they're  
16 affordable, and that TVA knows how to install these controls.  
17 It's installed each of this type of control on a few of its  
18 facilities. It knows that it can be done. However, in its  
19 long-range plan, it actually sets out most of these controls  
20 on a schedule that extends considerably into the future. So  
21 it's anticipating that at some point it will have to do these  
22 very things, but the evidence very clearly establishes that  
23 TVA does not actually install the controls until it has to do  
24 so. And that is no different from Duke or Progress or other  
25 utilities. So it plans for the future, but it takes those



1 steps and commits the money when it has to do so. Its  
2 long-range plan takes an unreasonably long period of time in  
3 view of the benefits to be achieved.

4           Moreover, the testimony of its own witness, in his  
5 deposition, Joseph Bynum, who said -- he testified in his  
6 deposition, which you now have in evidence, that the one  
7 thing you knew for certain is that TVA's plans will change.

8           The evidence, including the 10-K that was filed by  
9 TVA, put in evidence by North Carolina yesterday, establishes  
10 that TVA's long-range plan is based upon its estimate of what  
11 it needs to do to comply with the CAIR rule and the CAMR  
12 rule, both of which have been vacated.

13           Now, we have some assurance, not made in writing,  
14 not a commitment, but assurance that TVA is going to continue  
15 with its plans. But there is a significant -- there is some  
16 significance to the vacation of CAIR which North Carolina  
17 sought to avoid, and that is not only that it will have a  
18 chilling effect on TVA's expenditure of money that it's not  
19 required to spend by CAIR since it is vacated, but that other  
20 utilities, in addition, outside of TVA, will also hold up on  
21 the installation of pollution controls unless there is state  
22 law or something else to require them to do that. And you  
23 heard that from the testimony of Dr. Staudt, among others.

24           That fact makes the projections of attainment on  
25 which TVA's experts Tesche and Anderson place so much weight,

1 it makes those estimates of attainment in North Carolina much  
2 more doubtful. In fact, it cannot be accountable.

3 But TVA has not just changed its unannounced plans,  
4 its confidential plans; TVA has also actually changed plans  
5 that it's announced. You heard from a couple of TVA  
6 witnesses, including Mr. Kilgore yesterday, that TVA scrapped  
7 the plans for a Colbert scrubber in northern Alabama that it  
8 announced publicly in 2001; and Mr. Park testified that it  
9 was swapped for a scrubber -- or two scrubbers at John  
10 Sevier, close to the North Carolina border.

11 And I'd ask you, Your Honor -- no real explanation  
12 was given for that, but the facts surrounding these things  
13 give an explanation, and that is TVA was under pressure of a  
14 lawsuit with regard to the Colbert facility, which was  
15 dismissed, as Mr. Park testified, for statute of limitations  
16 reasons. And after that happened, then the swap was made.

17 But by the time TVA made the announcement of its  
18 John Sevier scrubber, it was already sued by the State of  
19 North Carolina, and the evidence clearly establishes, without  
20 question, both TVA's evidence and North Carolina's evidence,  
21 that the John Sevier facility, which has no SCRs, which has  
22 no scrubbers, and which prior to that time had no plan for  
23 scrubbers, that that was announced in anticipation of the  
24 defense that they planned to raise in this litigation. But  
25 without a requirement, there is no way for North Carolina or

1 this Court to count on the fact that that will happen.

2           Your Honor, TVA's view on this case is which one,  
3 TVA or North Carolina, can better predict what TVA is  
4 actually going to do by 2013. But this case -- the 2013 date  
5 is the date that North Carolina says, for a couple of  
6 reasons, this is the date by which TVA can install the  
7 controls we seek. But the nuisance is not happening in 2013.  
8 The nuisance is happening now, and North Carolina is entitled  
9 to relief if this Court finds that there is a nuisance  
10 occurring today. And that nuisance has not just been  
11 happening today, it's been happening for a long time, and  
12 that's been established by evidence that you have heard in  
13 this case.

14           The modelers modeled the benefits that could be  
15 achieved in 2013 if controls were put on, based upon the  
16 control scenario that is currently -- that was in place at  
17 TVA at the time North Carolina's modeling was done, and it is  
18 that same set of controls, at least the hard controls, that  
19 are operating right now. And TVA has been visibly at work  
20 while this matter has been in litigation building scrubbers  
21 at Kingston and at Bull Run. North Carolina has no doubt  
22 that they can finish those scrubbers and more by 2013. But  
23 if that happens, that doesn't mean that the benefits somehow  
24 magically disappear. That simply means that the health  
25 benefits and the visibility benefits that North Carolina

1 seeks will happen sooner rather than later. They don't  
2 disappear. They'll just happen sooner.

3           TVA has also attempted in this case to obscure the  
4 impact of its emissions, and its done it in a couple of ways,  
5 some of them more obvious than others.

6           The first is that when it, for the most part, when  
7 it's showing differences, or deltas as we call them, or the  
8 scientists call them -- when it's showing those deltas, it  
9 has in every case set out to show the deltas between what it  
10 says it's going to do by 2013 and what North Carolina wants  
11 it to do, thereby hiding, or obscuring, if you will, the  
12 benefit that will be achieved from where they are now and  
13 where they were two years ago when this case was filed and  
14 what they could be doing. That's one way that it's been  
15 obscured.

16           In addition, you saw some -- you saw a couple of  
17 examples of this, where TVA experts Tesche and Dr. Grigal --  
18 Dr. Tesche and Dr. Grigal -- both presented examples where  
19 they compared TVA's emissions to all the anthropogenic --  
20 I'll just say man-made -- all the man-made emissions in North  
21 Carolina put together. So you see a comparison of TVA's  
22 emissions, on the one hand, and North Carolina, not only Duke  
23 and Progress's emissions, but all of the motor vehicles in  
24 the state of North Carolina -- motor vehicles emit NOx -- all  
25 of the industrial sources in North Carolina, all of the

1 non-motor vehicles, the big construction equipment, and all  
2 of the area sources. That comparison was made -- and they  
3 didn't tell you about it. They had to be asked about that on  
4 cross-examination. That comparison was made to diminish the  
5 apparent significance of TVA's contributions.

6           TVA's experts, Anderson -- Dr. Anderson and  
7 Dr. Smith, argue to you that you should ignore all of the  
8 benefits that will accrue as a result of these emission  
9 controls except those in North Carolina. And then they ask  
10 you to say, just compare what TVA promises that it's going to  
11 do, an unenforceable promise, in 2013 and what North Carolina  
12 wants in the way of controls and asks this Court to provide.

13           This seriously understates the magnitude of the  
14 benefits that will actually happen between now and 2013 and  
15 thereafter, and every year thereafter, as a result of the  
16 controls that North Carolina seeks.

17           I'll remind the Court of the testimony of  
18 Mr. Myers. And you see this question and answer on your  
19 screen before you. Mr. Myers was asked last Wednesday:  
20 Mr. Myers, would you agree that, in general, the SO2  
21 emissions reductions that have been undertaken by TVA over  
22 the years have been driven by compliance with federal and  
23 state rules and consent decrees? And his answer was yes.

24           Indeed, the first of four scrubbers that TVA  
25 installed at the Paradise plant in Kentucky and Widows Creek,

1 only two of the units of the eight units at Widows Creek,  
2 were installed as a result of that consent decree. And then  
3 it took another 10 or 15 years for TVA to install more  
4 scrubbers at Cumberland plant in western Tennessee, and that  
5 was done, as he indicated, to comply with the acid rain  
6 program, a statutory program under the federal law.

7 And Mr. Kilgore did not dispute that yesterday.

8 In addition, there was a very telling bit of  
9 testimony that was brought forward, and it was also brought  
10 forward from Mr. Myers on last Wednesday, and that was that  
11 Duke and Progress, in the last three years, certainly under  
12 the compulsion of the Clean Smokestacks Act, had scrubbed  
13 more capacity in three years than TVA has scrubbed in the  
14 last 35 years. And the difference, the difference in that is  
15 not that Duke and Progress are better than TVA or vice-versa.  
16 The difference is that Duke and Progress are under a clear  
17 mandate and a clear schedule to install a large number of  
18 controls on a fixed deadline. They know how to do it, they  
19 are doing it, and the results are already being seen in  
20 advance of the deadlines for SO2 that come, actually, next  
21 year, because they will, in fact -- they plan, in fact, and  
22 they will, in fact, meet those deadlines. And TVA can do it,  
23 too.

24 The difficulty is that the federal scheme that's  
25 been in place has relied on a lawsuit here, an incomplete

1 acid rain program there, and it's going to take -- unless  
2 this Court acts, there is no way that North Carolina can be  
3 assured or anyone can be assured that it's not going to take  
4 another 20 years to get these controls in place. That they  
5 need to be done is well established, that TVA knows how to do  
6 it is well established, but only this Court's action is a  
7 real assurance that it will happen and that it will happen in  
8 a reasonable time.

9           We recognize, Your Honor, that your concern is most  
10 focused -- or your focus is greatest on Tennessee, Alabama,  
11 Kentucky, and North Carolina, and well it should be, for  
12 North Carolina is the plaintiff, and Alabama, Kentucky, and  
13 Tennessee are the states in which TVA's facilities are, but  
14 it's significant that TVA's emissions are creating a nuisance  
15 in those states, in each of those states, as well as in North  
16 Carolina, but we would ask that you not ignore -- that you  
17 should not ignore the benefits, the significant benefits that  
18 will accrue outside that state, as well, as you contemplate  
19 whether and what remedy to impose in this case.

20           **THE COURT:** How many scrubbers did Progress and  
21 Duke have on line before this Clean Smokestacks Act?

22           **MR. GULICK:** They had none, Your Honor. Duke and  
23 Progress, however, are not the State of North Carolina.  
24 They're privately-owned companies that make their decisions.  
25 And North Carolina was certainly, certainly not saying that

1 that was acceptable. In fact, you heard from Brock Nicholson  
2 that Duke and Progress -- the lack of scrubbers was not an  
3 acceptable situation, and the general assembly of the State  
4 of North Carolina determined that was not acceptable, and  
5 that's why it required the installation -- the pollution  
6 controls that are resulting in those scrubbers.

7 **THE COURT:** So mandates work on that system, too.

8 **MR. GULICK:** Mandates work, Your Honor, when the  
9 mandate is clear and there are no loopholes that can be  
10 exploited.

11 One of the serious difficulties with the federal  
12 law and the various federal laws that have been designed, is  
13 that they've got a lot of loopholes. And that's -- Duke and  
14 Progress complied with the acid rain amendments by buying  
15 allowances. So that was a loophole that they could exploit.  
16 It was available to them. But under the Clean Smokestacks  
17 Act, they cannot do that. And they're not doing it. They're  
18 installing controls as they are required to do.

19 **THE COURT:** Now, if TVA, as it says it's going to  
20 do, continues on the schedule that has been proposed, would  
21 that bring it into line with the North Carolina Clean  
22 Smokestacks Act?

23 **MR. GULICK:** What they propose to do -- what they  
24 say -- Your Honor, what they say they're going to do by 2013,  
25 will not do that. It's good. It's a good start, and it will



1 help a lot, but it will not finish the job. What it's --  
2 what its whole plan, the entire -- what their long-range plan  
3 has in there probably would do it, but who knows whether it  
4 will actually happen and who knows when it will happen.

5           What we would argue to you, Your Honor, is that  
6 without the requirement that it happen on a specific schedule  
7 there is no way that this Court or the State of North  
8 Carolina can count on it happening. Certainly, TVA's past  
9 has shown that it installs controls when it has to do so or  
10 when it's under significant legal pressure to do so. If the  
11 pressure is taken off, what we fear, Your Honor, and what the  
12 past would suggest, is that the action will stop. And that's  
13 because it costs money to do this.

14           But as Jim Staudt testified, their long-range plan,  
15 if it all went into effect and it went into effect at a  
16 reasonable time and on a mandated schedule, that would be a  
17 reasonable level of control. But we can't count on that.

18           Your Honor, the relief we think that is most  
19 appropriate and that we would ask that you consider is to  
20 impose a cap on TVA's facilities. That's what North Carolina  
21 has done with Duke and Progress. It gives flexibility to the  
22 company to find out the most cost-effective way to do it.  
23 It's not the only way to do it, but it is a reasonable  
24 method.

25           The Court could also cap them by state if it chose

1 to do so, and there's information in the record by which it  
2 could do that. But the proposal that North Carolina would  
3 make would be a reasonable -- would be a system-wide cap.

4 And I would like to --

5 **THE COURT:** What is North Carolina contending is a  
6 reasonable period of time for TVA to meet these standards?

7 **MR. GULICK:** We believe, Your Honor, that the  
8 testimony of Jim Staudt has established that TVA can meet all  
9 of those things by the year 2013. TVA put on no expert  
10 testimony refuting his evidence that there will be ample  
11 boilermakers available. That's the principal limiting labor  
12 to complete these projects. And now with the CAIR vacated,  
13 it's probably eased up demand -- and that's what he testified  
14 about -- on boilermakers, so there is ample labor available.  
15 And TVA has -- they did not counter that.

16 In addition, Your Honor, as TVA's evidence shows,  
17 they're on the way to doing some of this work. They're  
18 already constructing Bull Run. According to the photographs  
19 that they showed you, they've made substantial progress in  
20 the last year. They made substantial progress in Kingston.  
21 So our contention is, Your Honor, that they can do these by  
22 2013.

23 It is especially important that there be a mandate,  
24 however, and a schedule and a firm deadline. Deadlines work.  
25 They help focus energy where it needs to be focused. They

1 help focus priorities where they need to be focused.

2           **THE COURT:** Does the Clean Smokestacks Act leave  
3 open any potential for North Carolina companies to stretch  
4 out this period beyond 2013?

5           **MR. GULICK:** No, Your Honor.

6           **THE COURT:** So they can't come in and say, well, we  
7 just can't meet this deadline?

8           **MR. GULICK:** No. There is no provision for that in  
9 the statute whatsoever.

10           And, indeed, Your Honor, I think at the  
11 Cliffside -- well, North Carolina -- if anything, it's going  
12 to be more. In fact, the Cliffside permit, Your Honor,  
13 actually requires the retirement of four old unscrubbed  
14 units, and that's established in the -- as Cliffside, the new  
15 Cliffside unit comes on. This is in that 2008 report. I  
16 can't remember which exhibit number it is -- four old units  
17 are going to come off line, four old units that were  
18 unscrubbed. So, indeed, what is going to happen with that  
19 cap, that cap will not change even if there is more demand on  
20 the Duke and Progress system. They will have to clamp down  
21 further on their emissions at their plants with their need to  
22 use -- to get more capacity out of the existing units. So if  
23 they bring on new units, like the new Cliffside unit, they  
24 have to still come in under that cap, so they have to be more  
25 efficient.

1           As you heard, I think it was -- I'm blanking at the  
2 moment -- it was Bill Ross's testimony, Your Honor, that he  
3 does not see any possibility that the general assembly would  
4 relax the statutory requirement -- there is nothing in the  
5 statute that would allow Duke or Progress to avoid those  
6 caps, and he does not foresee any possibility that the  
7 general assembly would give them that.

8           So I'd like to reserve the balance of my time,  
9 unless Your Honor has more questions.

10           **THE COURT:** No.

11           **MR. GULICK:** Thank you.

12           **THE COURT:** Mr. Lancaster?

13           **MR. LANCASTER:** Good morning, Your Honor.

14           **THE COURT:** Good morning to you, sir.

15           **MR. LANCASTER:** Before I start arguing, I'd like to  
16 pause for a moment and say thank you. The court personnel,  
17 from the front door on up, has been hospitable and helpful to  
18 us in the last two weeks, and I don't think we could have  
19 done it without all the help we've received. It's been a  
20 pleasure to try a case here.

21           Your Honor, when I introduced myself and my  
22 colleagues about a couple of weeks ago, I said that we would  
23 present the evidence that would show that TVA is not a public  
24 nuisance, and that is what we have done, Your Honor. The  
25 evidence that has been presented to this Court does not

1 establish that TVA is a public nuisance.

2           That, of course, begs the question: What is a  
3 public nuisance? What does one have to show to establish a  
4 public nuisance? What is it that I'm saying the plaintiffs  
5 have failed to prove?

6           As the Court is well aware from reading the briefs,  
7 there is not a very good definition of public nuisance in the  
8 case law, but there are three elements that are common to all  
9 the cases. There must be unreasonable conduct by the  
10 defendant that must cause significant harm to the plaintiff.  
11 And that is what plaintiff has failed to prove here. Rather  
12 than showing that plaintiff engaged -- excuse me. Rather  
13 than showing that TVA engages in unreasonable conduct, what  
14 the evidence shows is that TVA uses this country's most  
15 abundant resource, coal, in a responsible way to provide a  
16 vital commodity, reliable, affordable electricity to over  
17 9 million people living in the Tennessee Valley.

18           Now, there are two legal issues I'd like to address  
19 briefly at the very beginning because I think that they need  
20 to be faced on. They cover everything else that happens.

21           The first one is who is it that has to suffer this  
22 significant harm. And the answer, Your Honor, that we submit  
23 should be applied here in this case is North Carolina. North  
24 Carolina is the one whose significant harm, if it is proven,  
25 should drive a finding, not all these other states. The

1 plaintiff throughout this trial has tried to present evidence  
2 that TVA is hurting people or killing people in Ohio and all  
3 kinds of other states; that there is acid deposition in  
4 Virginia; that there is visibility impairment in Mammoth Cave  
5 in Kentucky. Plaintiff has even argued that there are areas  
6 in Tennessee, Alabama, and Kentucky that aren't attaining the  
7 Clean Air Act air quality standards, and it blames TVA for  
8 that and suggests this Court ought to do something about it.

9 I respectfully submit that, as Mr. Styke explained  
10 from the witness stand yesterday, the State of Tennessee has  
11 that under control and doesn't need North Carolina's help,  
12 and I dare say, from Mr. Styke's reaction, doesn't want North  
13 Carolina's help.

14 Your Honor, we respectfully submit that the impacts  
15 that must be assessed are those to North Carolina, and that  
16 if North Carolina fails to prove that it, itself, is  
17 suffering harm sufficient to support a remedy, it should not  
18 be allowed to present a case based on claims of harm to  
19 someone else somewhere else. In fact, I believe Mr. Gulick  
20 put it best in his opening statement when he said, it is a  
21 fair and reasonable demand on the part of the State of North  
22 Carolina that the air of its territory should not be  
23 polluted, that its mountains should not be destroyed or  
24 threatened by acts of TVA. That's what this case really  
25 should be about, North Carolina's air and North Carolina's

1 mountains.

2           The second point I'd like to address at the  
3 beginning, Your Honor, are the issues in this case which the  
4 plaintiff's evidence has not actually addressed.

5           Right before the start of the trial, the Court  
6 entered an order setting forth the issues to be tried and  
7 making clear that, as the Supreme Court has held, sources can  
8 only be held liable under state law, under the source state  
9 law; that plaintiff needed to present three different issues:  
10 That the Kentucky plants are nuisances under Kentucky law;  
11 the Tennessee plants under Tennessee law; and Alabama plants  
12 under Alabama law. And that has not been addressed. And a  
13 good example of that, Your Honor, is TVA's two Kentucky  
14 plants. TVA has the -- they're both in far western Kentucky.  
15 The Paradise plant has -- neither one of them is there any  
16 evidence have engaged in unreasonable conduct. The Paradise  
17 plant has three units. All three of them have scrubbers, the  
18 Cadillac pollution control for sulfur dioxide. All three  
19 have SCRs, the Cadillac pollution control for nitrogen  
20 oxides. The Shawnee plant has ten smaller units. Nine of  
21 those units burn low-sulfur coal. Those nine units also  
22 employ low-NOx burners. The tenth is a special kind of unit  
23 called a fluidized bed unit, that the testimony has shown, is  
24 a low-emitting plant. So the two Kentucky plants are  
25 low-emitting plants to start with.

1           Further, the testimony yesterday from Mr. Bridgers  
2 is that the predominant wind direction during the time of the  
3 year when North Carolina has air quality issues is from the  
4 southwest. Those plants are to the northwest of North  
5 Carolina. And all the air quality modeling that we've heard  
6 confirms the common sense belief that the emissions from  
7 those plants aren't impacting North Carolina. The numbers --  
8 what the modelers call it is zero out. They run their model  
9 and take those plants completely away and see what the effect  
10 is, and those numbers were minuscule, Your Honor. A good  
11 example is the visibility numbers. Even taking those plants  
12 away entirely, the visibility numbers came out to be below  
13 the threshold of perceptibility that plaintiff's witness  
14 Mr. Molenaar testified, and so what that evidence means is  
15 that the Paradise and Shawnee plants could disappear and no  
16 one in North Carolina would ever be able to tell the  
17 difference.

18           Your Honor, we respectfully submit that the  
19 plaintiffs have not proven the issues that are set forth in  
20 this case. For that reason alone, plaintiff cannot win this  
21 case.

22           But even if plaintiff were allowed to pursue a  
23 claim against TVA's whole system, measuring together all 11  
24 plants in all three states, plaintiff has still not proven a  
25 nuisance. Plaintiff has not proven that TVA's plants are a



1 nuisance now and plaintiff has not proven that TVA's plants  
2 will become a nuisance in the future.

3 I'd like to start with now. There has been no  
4 evidence showing that today TVA operates its power plants in  
5 an unreasonable way that causes significant harm to the  
6 plaintiff. "Unreasonable" is not the word to describe TVA's  
7 operations. A better word would be "congratulations." That  
8 was the word that Secretary Ross used. He met with TVA  
9 several years ago, and then he wrote a letter thanking TVA  
10 for outlining its accomplishments and its plans, and he wrote  
11 congratulations to TVA.

12 Your Honor, that's a more appropriate word than  
13 "unreasonable," because "congratulations" are indeed in  
14 order, and we can look at a number of different ways to  
15 measure TVA's performance that show it is not unreasonable.

16 Let's start with the emissions rates. Dr. Staudt,  
17 one of plaintiff's witnesses, testified that, in his view,  
18 that's the best measurement of a power plant's performance.  
19 How much pollution does it take to make a unit of  
20 electricity? That measures the trade-off between the  
21 benefit, the electricity, and the cost, the pollution.

22 The major pollutant in this case is sulfur dioxide.  
23 It is the one that, according to the plaintiff, and the  
24 plaintiff is right, is the largest contributor among the  
25 pollutants to fine particulate matter, to the sulfate. That

1 is the pollutant the plaintiff claims accounts for all of  
2 these premature mortalities. It's the one plaintiff claims  
3 accounts for the visibility impairment. The sulfur dioxide  
4 piece of the case is the most important part of the case, and  
5 on that piece, TVA's emission rates are far superior to those  
6 that the State of North Carolina allows its own utilities to  
7 have here in North Carolina. 25 to 40 percent better, year  
8 after year, are TVA's sulfur dioxide emission rates.

9           The other main pollutant in the case, nitrogen  
10 oxide, or NOx, TVA isn't far superior to North Carolina but  
11 it is on par with North Carolina. During ozone season, the  
12 two systems have almost exactly the same emission rate.

13           Now, there's been a lot of testimony about  
14 year-round operation of nitrogen oxide controls. It's true  
15 that TVA operates, currently, its SCRs, its Cadillac  
16 pollution controls, during ozone season, May to September,  
17 but the evidence is undisputed that that's the time that's  
18 important. During the wintertime, as Mr. Bridgers testified  
19 yesterday, the state of North Carolina is code green, as they  
20 put it, for ozone. There aren't high ozone levels in the  
21 wintertime. Summertime is the time that it's important to  
22 operate those pollution controls, and TVA does so just as  
23 well as the utilities in North Carolina do. And those  
24 utilities are not expected to get better on their NOx  
25 controls. They've already hit their NOx deadline, which came

1 earlier.

2 In operating its system to achieve these emission  
3 rates, TVA employs a fleet of these SCRs that is one of the  
4 best in the nation. The evidence is that 60 percent of TVA's  
5 capacity is equipped with these SCRs, these Cadillacs for NOx  
6 control.

7 At his deposition, Dr. Staudt told me that a third  
8 of the rest of the nation had what was equipped with SCRs.  
9 He told me at the trial here that it's up to a half, but in  
10 neither case is it up to 60 percent. TVA is already ahead of  
11 the curve in NOx controls. TVA was way ahead of the curve on  
12 putting in scrubbers for sulfur dioxide emissions, although  
13 it's true that others are catching up with TVA.

14 As Gordon Park testified, TVA put on scrubbers at  
15 Widows Creek in the '70s -- that's in Alabama; at Paradise in  
16 Kentucky in the '80s; at Cumberland in Tennessee in the '90s.

17 Mr. Gulick is correct that Duke and Progress are  
18 catching up; and he characterized it as putting on more  
19 scrubbers in three years than TVA put on in 35. Well,  
20 actually, they've been doing it for 35, too, but they did  
21 none for the first 32. TVA's approach is steady reductions  
22 over time. And that is continuing, with more scrubbers  
23 coming on line at Bull Run, at Kingston, and John Sevier.  
24 Steady reductions. That's TVA's history and that's TVA's  
25 future.

1           Now, Dr. Staudt testified that he believed TVA's  
2 operations today are unreasonable because they don't conform  
3 to what he calculated as what he called a reasonable emission  
4 rate. And to calculate this reasonable emission rate, Dr.  
5 Staudt really had to play some games with the numbers. He  
6 speculated -- and it's based on what he thinks Duke and  
7 Progress will do in North Carolina in the year 2013. And he  
8 speculated that Duke and Progress will have very high growth  
9 rates on their coal-fired power units, even though they  
10 aren't projecting that. He speculated that Duke will be  
11 operating a brand new plant at Cliffside, which isn't built  
12 yet and which has a lawsuit which I now understand is on Your  
13 Honor's docket and may never be built. He also speculated  
14 that Duke would continue to run a number of units that Duke  
15 has announced it is going to close. And so he came up with a  
16 large generation number that goes on the bottom of the  
17 fraction. The bigger the number on the bottom, the smaller  
18 the overall rate.

19           So he has a number of problems in the emission rate  
20 that he developed. It's a speculative one. But what's more,  
21 it's clear it doesn't exist anywhere in the real world right  
22 now. Nobody emits at these so-called reasonable emission  
23 rates. He squarely admitted that Duke and Progress don't do  
24 it here in North Carolina right now.

25           Then we marched all the way around TVA together.

1 Georgia, Alabama, Mississippi, Arkansas, Kentucky, Virginia.  
2 None of those states have utility systems that operate with  
3 these so-called reasonable emission rates. I respectfully,  
4 submit, Your Honor, that TVA cannot be failing to act  
5 reasonably by failing to do something that nobody does.

6 Your Honor heard a lot of testimony about computer  
7 air dispersion modeling. We heard almost a full day from the  
8 plaintiff combined by Mr. Chinkin and Mr. Wheeler. The Court  
9 heard an entire day from Dr. Tesche from TVA.

10 What all this sophisticated computer modeling shows  
11 is two important facts. It shows that the amount of  
12 pollution that TVA sends into North Carolina is less than the  
13 amount of pollution that North Carolina's own power plants  
14 put into North Carolina. It also shows that the amount of  
15 pollution that TVA sends into North Carolina is less than the  
16 amount of pollution that North Carolina's power plants send  
17 to their neighbors, like Virginia. And that's another  
18 standard of reasonableness, Your Honor. TVA is providing  
19 less pollution into North Carolina than North Carolina is  
20 willing to tolerate from its own power plants, and it's  
21 sending less pollution into North Carolina than North  
22 Carolina is willing to allow its power plants to send  
23 somewhere else.

24 The final point on the reasonableness of TVA's  
25 conduct goes to the permits, Your Honor. All of TVA's power

1 plants are specifically authorized by their states to do  
2 exactly what they do. They are issued very detailed permits  
3 and they comply with those permits.

4 Now, I have to correct a statement that I made in  
5 my opening statement. I said those permits were so detailed  
6 they filled two notebooks. When we got into it, I realized  
7 it was actually three. These notebooks provide a lot of  
8 detail that govern TVA's operations, and TVA complies with  
9 them.

10 The plaintiff has thrown up several red herrings  
11 about the compliance status, and I'd like to cover them  
12 briefly.

13 First is the Widows Creek duct leak. That  
14 happened, Your Honor. TVA was found to be in violation by  
15 the State of Alabama. It issued a notice of violation.  
16 That's not unusual. It's unfortunate when there is a  
17 violation, but when there are so many power plants and so  
18 many rules and regulations, sometimes one is broke. TVA did  
19 what it should do, as Gordon Park said, when these things  
20 happen. We investigate, we figure it out, we fix it, we do  
21 whatever is required by the state, and we try to make sure it  
22 doesn't happen again. That's what happened here. TVA paid a  
23 \$100,000 fine, fixed the problem. There is no evidence it's  
24 going on now or contributing to any kind of a nuisance.

25 The second one is something called opacity. And

1 opacity is a measurement of what the smoke looks like when it  
2 comes out of the power plant. It's true that a court found  
3 that TVA violated the opacity rules from 2000 to 2002 at its  
4 Colbert plant, but that has nothing to do with the main  
5 pollutant in this case, which is sulfur dioxide.

6 Sulfur dioxide is an invisible gas. You can't see  
7 it and so the opacity meter doesn't even register. When you  
8 see the smoke, you don't see it. So this violation has  
9 nothing whatsoever to do with this case. And furthermore,  
10 Your Honor need not take on the burden of dealing with it  
11 because there is a federal judge in Birmingham right now who  
12 is dealing with it, and he is holding a remedy trial later  
13 this year to decide what, if anything, needs to be done about  
14 the opacity.

15 The third is New Source Review. We heard from a  
16 man named Mr. Buckheit. Mr. Buckheit is a lawyer, and he is  
17 the one who prosecuted TVA for allegedly violating New Source  
18 Review. I don't think I'm going too far into new legal  
19 territory to say that I think even TVA ought to be innocent  
20 until proven guilty, and TVA has never been proven guilty of  
21 these NSR violations. TVA does deny it. No court anywhere  
22 has ever held that TVA actually violated these rules. The  
23 only court ever to reach a final decision was in Alabama, and  
24 it dismissed the case.

25 And unlike what Mr. Gulick said, North Carolina is

1 not without the protection of federal law. North Carolina  
2 could sue, could sue TVA if North Carolina thought there were  
3 New Source Review violations. In fact, Secretary Ross  
4 identified a letter that North Carolina sent to TVA back in  
5 2004 saying it would sue TVA within 60 days for violating New  
6 Source Review. North Carolina never did. Those allegations  
7 have never been established in court and TVA denies them.

8           What's important, Your Honor, about the permits is  
9 that they exist and that TVA complies with the sulfur dioxide  
10 and the nitrogen oxide emissions limits. Those pollutants,  
11 the emissions are measured continuously, 24 hours a day, 7  
12 days a week, 365 days a year, reported to the state, and TVA,  
13 the evidence showed from Gordon Park, always complies with  
14 all of those requirements in its permits about the pollutants  
15 at issue in this case.

16           Not only has plaintiff failed to prove that TVA's  
17 conduct is currently unreasonable, plaintiff has also failed  
18 to prove significant harm. We've been told that North  
19 Carolina's economy is suffering. We heard from Lynne Minges,  
20 the director of tourism in the state, and she confirmed that  
21 that's not true. She stated from the witness stand, we have  
22 a strong economy. She explained that North Carolina has set  
23 records for tourism dollars spent year after year and that  
24 North Carolina is the top destination state of any in the  
25 nation for people to move into.



1           One thing that's interesting and fun about trial  
2 work, Your Honor, is you get to meet a lot of interesting  
3 people, and we met a number of very nice people who came and  
4 shared their stories.

5           We heard from Mr. Prevost at Chimney Rock, and he  
6 talked about how back in the '80s they were able to advertise  
7 75-mile views, and now they can't do that anymore. Well, it  
8 doesn't add up, Your Honor, that that has anything to do with  
9 TVA. Back in the 1980s, TVAs sulfur dioxide emissions were  
10 up around a million tons a year. Now they're down under  
11 400,000 tons. There has been no evidence that would show why  
12 TVA's reducing its emissions so substantially would cause  
13 visibility to get worse.

14           We heard from Mr. Prevost at Grandfather Mountain,  
15 and he talked about the measurements that he's made of the  
16 rime ice and sent off for analysis, and, as he explained, the  
17 pH levels have jumped recently. Well, higher pH is good.  
18 What the higher pH levels means is there is less acid in the  
19 ice. That means that the acid rain program is actually  
20 working and things are getting better. We heard from  
21 Mr. Harlan and his wife, Dr. Diznoff, about the terrifying  
22 experience they had as he attempted to run 72 miles in the  
23 Smoky Mountains. It was just an awful experience, Your  
24 Honor, but there was no evidence that TVA had anything to do  
25 with it. The two plants that TVA has that are closest to the

1 Smokies already have the top-of-the-line NOx controls, the  
2 ozone precursor, at Bull Run and Kingston. There is simply  
3 no evidence that that awful experience had anything to do  
4 with TVA.

5           And those pollution controls for the NOx, that's  
6 good news for Dr. Russell's patients across the mountains  
7 here, too. And the more good news is that North Carolina has  
8 been seeing record lows of its ozone levels. And as  
9 Mr. Bridgers testified yesterday, they have gone back up when  
10 the weather was more conducive to forming ozone, but in those  
11 years, they are still substantially lower than prior years  
12 with similar weather. So air pollution has gotten better.

13           Now, I don't contend things are perfect. I don't  
14 contend there is never a hazy day in North Carolina. Your  
15 Honor could take judicial notice that there are. But there  
16 has been no evidence that the finger ought to be pointed at  
17 TVA for that. In fact, we've seen a number of analyses from  
18 North Carolina scientists within the Division of Air Quality  
19 that the finger ought to be pointed at North Carolina's own  
20 pollution sources.

21           We saw analyses of the ozone levels at Coolamee  
22 that said they came from Charlotte; they didn't come from  
23 TVA. We saw an analysis of the PM2.5, the fine particulate  
24 matter, in two of the counties that are not attaining the  
25 standard, Catawba and Davidson, and it showed that all of the

1 data show that the prevailing source region of the pollution  
2 was North Carolina. One of the North Carolina scientists put  
3 it best in an e-mail when he said that this analysis showed  
4 that North Carolina is the major culprit.

5 We heard that there's something called the  
6 Charlotte ozone plume, and that many of the days here in the  
7 mountains, in the Triad, and Hickory, when ozone is high,  
8 it's because of the Charlotte ozone plume.

9 Mr. Nicholson testified the very first day of this  
10 trial -- he's the Deputy Air Director of North Carolina  
11 Division of Air Quality -- that at the time North Carolina's  
12 Clean Smokestacks Act was passed in 2002, its utilities  
13 emissions were pretty excessive. Those were his words.  
14 Pretty excessive.

15 Well, for the next four and a half years after that  
16 act was passed, they went up. For the four and a half years,  
17 Duke and Progress's emissions, which started out as pretty  
18 excessive, were even higher. That may have something to do  
19 with air quality issues that they have.

20 We heard testimony that Catawba County is in a  
21 nonattainment area for fine particulate matter. Right next  
22 to Catawba County, in fact, in eastern Catawba County, is  
23 Duke's Marshall plant. It's a very large power plant. It  
24 emitted almost 100,000 tons a year of sulfur dioxide, and it  
25 had no scrubber. Now it does have a scrubber. That's a good

1 thing. Instead of putting a scrubber in, say, back in 1995  
2 when TVA put its scrubber on the Cumberland plant, Duke  
3 waited until recently. But now there is a scrubber on that  
4 plant, those emissions are reduced, and now the county is  
5 coming back into attainment of the air quality standard. I  
6 think it's pretty clear what the problem was there and that  
7 the problem has been fixed.

8           There is another problem, Your Honor, that hasn't  
9 been fixed. Blue Ridge Paper Products. It's a plant -- it's  
10 a paper mill, but it also runs some old power boilers,  
11 coal-burning boilers that date back to 1920, emitting 8,000  
12 tons a year of sulfur dioxide right in the mountains here in  
13 North Carolina.

14           Back on the first day of trial, we heard from Bill  
15 Jackson, called by the plaintiff, Bill Jackson of the Forest  
16 Service, within the Department of Agricultural, and he  
17 testified of his grave concerns about the impact that this  
18 plant is having, and his analysis, which is in evidence, is  
19 that this little paper mill, with its own 1920 boiler, by  
20 itself, is impacting visibility 200 days a year in places  
21 like Linville Gorge and Shining Rock. 200 days a year just  
22 from that little plant. And we heard from Mr. Nicholson and  
23 Mr. Jackson that the state has decided to give that plant  
24 until 2018 to clean up its act.

25           Your Honor stated in an order entered before the

1 trial that the Court would require strictest proof that  
2 plaintiff's own conduct does not produce the result of which  
3 North Carolina complains, and I submit that the plaintiff has  
4 not carried that burden.

5 Now, the plaintiff's primary evidence hasn't  
6 focused on anything. The plaintiff's -- on any of these.  
7 The plaintiff's primary evidence of TVA supposedly currently  
8 being a nuisance is something called the Southeastern  
9 Appalachian Mountain Initiative report, or SAMI, as it's been  
10 known for short.

11 We never heard anything about SAMI all through the  
12 discovery of this case. When the Court reviews the expert  
13 reports, the plaintiff's first set and the plaintiff's second  
14 set, you will see they don't talk about SAMI. SAMI was a  
15 last-minute addition to the case, and it came in a third set  
16 of reports that were the -- they came out in the last week of  
17 discovery.

18 And we heard a lot about SAMI the first day of this  
19 trial. We haven't heard that much about SAMI since North  
20 Carolina's witness, Mr. Wheeler, testified that in his view  
21 it was scientifically unreliable. But that report pre-dates  
22 all the way back to 2002. There was nothing new in that  
23 report, there was nothing unknown in that report, and the  
24 fact of the matter is, it does not support plaintiff's case.  
25 It suggests that emissions reductions are good, but TVA is

1 already making those reductions. It's reduced its sulfur  
2 dioxide emissions nearly 200,000 tons a year just since 2002.  
3 That report is outdated and does not support plaintiff's  
4 case.

5           Your Honor, there has been a complete failure of  
6 proof of any current ongoing nuisance, and I would suggest  
7 that the reason for that is that this case isn't actually  
8 about the present. This case is about the future.

9           The plaintiff, State of North Carolina, has done a  
10 very good thing in passing its Clean Smokestacks Act. That's  
11 a good thing that Duke and Progress will be reducing their  
12 emissions. And the apparent theory that's being presented  
13 here, Your Honor, is that if TVA doesn't make emissions  
14 reductions, then the state will lose the benefit of what it's  
15 doing. It will spend a lot of money reducing emissions but  
16 it won't be able to stop emissions coming in from out of  
17 state. And from a theoretical standpoint, that's not a bad  
18 theory, but from a factual standpoint, it's just untrue. TVA  
19 has been making steady reductions for years, and there is no  
20 evidence, Your Honor, that TVA will change its course and  
21 begin to emit more or fail to reduce.

22           Now, the whole case, as I said in my opening  
23 statement, is built on Dr. Staudt. He made emissions  
24 projections of what he expected TVA would do in the year  
25 2013. And as I indicated, every witness that followed Dr.

1 Staudt to the stand would base their opinions on his  
2 projections, and if his projections were wrong, their  
3 opinions would be wrong.

4 Dr. Staudt's projections are wrong. He expects  
5 that TVA is going to have 450,000 tons of sulfur dioxide in  
6 2013. But we're already below that. TVA was down to 374,000  
7 last year and has, coming on, the Bull Run scrubber, which  
8 will cut another 30,000 tons in 2009; the Kingston scrubber,  
9 in 2010, will cut another 50,000 tons; the fuel switch at  
10 Johnsonville, which is already underway, will cut another  
11 40,000 tons by 2011; and the scrubber at John Sevier, which  
12 will be on line by 2012, will cut another 30,000 tons. In  
13 fact, as Mike Scott, who has been doing this work on an  
14 everyday basis for TVA for ten years, has explained, based on  
15 TVA's own planning documents that it relies on to make  
16 decisions every day, Dr. Staudt's sulfur dioxide emissions  
17 estimates for TVA for the year 2013 are 200,000 tons higher.  
18 There is just no validity to the underpinning of the fear  
19 that TVA will fail to reduce its emissions. And each of the  
20 witnesses who followed Dr. Staudt to the stand acknowledged  
21 that if he was wrong, they were wrong. Mr. Chinkin and  
22 Mr. Wheeler acknowledged that that mistake would impact their  
23 calculations. Dr. Levy acknowledged that if the emissions  
24 estimate were wrong, that would affect his mortality  
25 calculations. Mr. Molenaar acknowledged that, the visibility

1 expert, and Dr. Driscoll acknowledged that.

2           Your Honor, what the witnesses have talked about is  
3 a delta, and what the delta comes from is these emissions  
4 projections I'm talking about. North Carolina has identified  
5 a level of emissions for TVA that it believes is comparable  
6 to the North Carolina Clean Smokestacks Act. As we discussed  
7 with Dr. Staudt, there are some real issues with that. But  
8 let's just take it for the sake of argument.

9           TVA's projections are that it will be a little bit  
10 above that. North Carolina's projections are that it will be  
11 a lot above that.

12           This is what I call the real delta, the one that's  
13 based on TVA's projections; the other one is what I call the  
14 North Carolina delta. And the real delta, the one based on  
15 TVA's projections, what that impact is is almost  
16 imperceptible in North Carolina. It's illustrated by  
17 Dr. Anderson's chart, county by county by county. You can  
18 look at the small portion of the pollution that North  
19 Carolina attributes to TVA and claims is excessive, and it's  
20 so small, one can hardly see it. In fact, if those are the  
21 real facts, if Mike Scott's projections are accepted, North  
22 Carolina has presented no evidence of a nuisance. Dr. Levy  
23 didn't do any calculations purporting to find that there will  
24 be premature mortalities from this little small amount of  
25 excess emissions, as they call it. Mr. Molenar, in fact,



1 admitted, if this is the way it turns out, there won't even  
2 be any visibility impact in North Carolina from TVA's whole  
3 system.

4           Your Honor, I submit that the only realistic  
5 evidence about what things are going to be like in 2013 comes  
6 from the TVA, and TVA's emissions are going to be lowered to  
7 the point where North Carolina need not worry. And, in fact,  
8 this extra pollution, as North Carolina calls it, is not  
9 huge, as Mr. Chinkin said. It's not significant. It's less  
10 than 0.1 micrograms throughout the whole state. In fact,  
11 it's, on average, at 0.03, and the best word for that is the  
12 one used in official documents by North Carolina, as  
13 Mr. Bridgers explained yesterday and I wrote on the flip  
14 chart -- the best word for that is "minuscule," Your Honor.

15           Now, although we know that Dr. Staudt's projections  
16 are wrong, let's just assume for a minute that they're right.  
17 Let's just assume for a minute that TVA reverses course and  
18 increases -- and although we're 75,000 tons below where  
19 Dr. Staudt projects, TVA reversed its course and increases  
20 its emissions by that 75,000 tons, fails to bring on the  
21 scrubber at Bull Run, fails to bring on the scrubber at  
22 Kingston, calls a halt to the fuel switch at Johnsonville,  
23 pulls the plug on the John Sevier scrubber. Let's assume TVA  
24 does none of those things -- does those things and does have  
25 all the emissions Dr. Staudt projects. Well, in that case,

1 Your Honor, the extra pollution, the whole dot is a little  
2 bit bigger, but it's still only 0.3 micrograms per cubic  
3 meter at its largest in the whole state, and most of the  
4 state it's even smaller, and that small amount of pollution  
5 is not sufficient to support the claims of harm that North  
6 Carolina has put forward.

7           Let's start with the mortality and the health  
8 harms. Dr. Anderson, who worked at TVA for 20 years  
9 establishing risk assessment programs, as she explained to  
10 the Court, the National Ambient Air Quality Standard set  
11 levels of pollution that are safe. That's EPA's job. They  
12 have to set the level at a level -- they set it at a level  
13 that is adequate to protect human health, public health, with  
14 an adequate margin of safety even for sensitive  
15 sub-populations, even for people with asthma, even for  
16 children. And EPA has set that level at 15. There are some  
17 who have argued that that's not good enough and that it ought  
18 to be lower and set at 13.

19           Well, the fact of the matter is, these small  
20 pollution increments are projected to take place when the  
21 whole state of North Carolina is not only below the 15 safe  
22 level, not only below the lower 13 safe level that some argue  
23 for, below 12. The entire state is going to be at a level  
24 well below the standards set by the EPA and set by the State  
25 of North Carolina, who sets its own health standards.

1           Your Honor, Dr. Levy testified that he could  
2 calculate these premature mortalities, but he also  
3 acknowledged in his cross-examination that his methodology  
4 was described using the word "unreliable" by EPA and that EPA  
5 refused to rely on that kind of methodology when it set the  
6 standard.

7           He also testified that he didn't do the kind of  
8 uncertainty analysis that would be required to publish his  
9 work in a peer-reviewed journal. The law is clear that a  
10 scientist coming into the courtroom should apply the same  
11 intellectual rigor in the courtroom that he applies outside  
12 of it. And Dr. Levy didn't do that here.

13           Dr. Peden, from the University of North Carolina,  
14 testified about the effects that particulate matter could  
15 have on health. But when I asked him in cross-examination,  
16 he acknowledged that the studies he was relying upon involved  
17 exposures of 200 micrograms per cubic meter, not 0.3  
18 micrograms per cubic meter. That's a hundred -- or a  
19 thousand times as much exposure as we have here.

20           Dr. Peden also informed us that all of these health  
21 problems, cardiovascular, hospitalization, and death, stroke,  
22 asthma prevalence, heart disease, they're all higher in the  
23 eastern part of the state. In other words, the closer you  
24 come to TVA's territory, the better the health statistics  
25 are, and that's inconsistent with the plaintiff's claim that

1 TVA is causing the problem.

2 Dr. Moolgavkar. Much has been said of him. He's  
3 the only epidemiologist who testified in this case. None of  
4 the plaintiff's witnesses are epidemiologists. And as he  
5 testified, the epidemiological literature is simply too  
6 inconsistent to support the kinds of calculations that  
7 Dr. Levy made here.

8 Your Honor, moving from the health impacts to the  
9 acid deposition impacts, both sides' witnesses agreed.  
10 Plaintiffs called to the stand Mr. Jackson from the  
11 Department of Agricultural. TVA called to the stand  
12 Dr. Grigal. They both testified that places like Linville  
13 Gorge are in a steady state resulting from their response to  
14 the industrial revolution and reducing emissions by the  
15 amount that TVA is being asked to reduce here won't make any  
16 difference. And it is not as Mr. Gulick characterized it:  
17 It's already ruined, so who cares?

18 Your Honor, the point of the matter is there would  
19 be no remedy. If TVA were to make reductions even beyond  
20 what plaintiff asked for, there is no evidence that that  
21 would have an impact for hundreds of years and there is no  
22 support for an injunction.

23 As Dr. Grigal also explained, the lower mercury  
24 amounts that would be attained, even if plaintiff's evidence  
25 were believed, are insignificant and unmeasurable.

1           So, Your Honor, the evidence does not support  
2 plaintiff's case even if Dr. Staudt's projections are  
3 believed, and we know from all the evidence that we've heard  
4 that they're wrong.

5           In addition to the wrong information that Dr.  
6 Staudt put forward, there is a question that has been lurking  
7 throughout this case that has not been answered, and that  
8 question is: Why 2013? What's the magic about that year for  
9 TVA?

10           Unanswered is the question of why TVA should be  
11 given four years to make all these reductions when North  
12 Carolina gave its own utilities 10 years to do it when it  
13 passed its law in 2002. Why should TVA have to do in four  
14 years what North Carolina gives its utilities 10 years to do?

15           Unanswered is the question of why TVA should have  
16 to build SCRs and scrubbers at the same time. The way that  
17 the Clean Smokestacks Act worked in North Carolina allowed  
18 North Carolina utilities to sequence those and build the SCRs  
19 first and then the scrubbers. As Mr. Nash, who built 21 SCRs  
20 for TVA, explained, that's the smart way to do it, because  
21 sometimes you can't fit all the people and equipment on site  
22 that are necessary to equip them both at once.

23           Unanswered is the question of why TVA should have  
24 to build scrubbers on all its plants, as Dr. Staudt specified  
25 in his proposed remedy, when the North Carolina utilities are

1 not building scrubbers except for only on about half of their  
2 units.

3           Unanswered is the question of why TVA's rate payers  
4 should have to have a rate increase. The evidence was clear,  
5 and it all came from the plaintiff's side, the State of North  
6 Carolina was unwilling to pass the Clean Smokestacks Act if  
7 it would require a rate increase. That's what Mr. Nicholson  
8 testified. Dr. Tierney, plaintiff's finance witness,  
9 testified that this remedy would require a rate increase of  
10 TVA's rate payers, 4 to 6 percent in her estimation.

11           And unanswered is the question of why TVA ought to  
12 have to do all these things by 2013, when Blue Ridge Paper,  
13 which is causing such problems here in North Carolina, is  
14 being given until 2018 to come up with a plan to clean up its  
15 act.

16           Secretary Ross, the plaintiff's last witness,  
17 testified that he only wanted to see TVA make comparable  
18 reductions on a comparable schedule to what North Carolina is  
19 doing, but what North Carolina is really asking for is more  
20 reductions on a faster schedule.

21           Your Honor, although there is no answer to these  
22 questions, there is a good answer about what ought to be done  
23 in this case, and it comes out of Supreme Court decisions  
24 from Kentucky, Alabama, and Tennessee. All three of those  
25 courts -- and they are cited in our trial brief, pages 53 to

1 55 -- have issued decisions laying out a very commonsensical  
2 rule, and I can state that rule without using legalese as  
3 "Let's wait and see."

4           If you're talking about something in the future  
5 that is uncertain, you don't know it's going to happen -- and  
6 in this case we don't even have good reason to believe it's  
7 going to happen -- the best thing to do is you don't enjoin  
8 the future nuisance; you wait and see if a nuisance actually  
9 arises. And that's what those courts have done in a number  
10 of cases, and they set a high, high standard for proving a  
11 nuisance in the future, which requires certainty.

12           The case can be dismissed and there will be nothing  
13 to stop North Carolina from coming back here in the future if  
14 it needs to, if it turns out that TVA does, in fact, cause  
15 the problems. But the good news about that, Your Honor, is  
16 that nobody will be coming back here because there won't be  
17 any reason to come back here.

18           May I approach the map?

19           **THE COURT:** Yes.

20           **MR. LANCASTER:** This case isn't really about TVA's  
21 system, Your Honor. This case is about three plants, John  
22 Sevier, Bull Run, and Kingston. This case is about those  
23 three facilities, Your Honor.

24           I'm not acknowledging that those facilities are  
25 nuisances. They're not. But the evidence from both sides is

1 clear and undisputed that a power plant has the greatest  
2 impacts near the plant. Those three power plants are near  
3 North Carolina. They're virtually in North Carolina. Those  
4 three power plants are near the Smoky Mountains. That's  
5 where they would be expected to have their greatest impacts.  
6 The good news about that, Your Honor, is that TVA is doing  
7 everything that can be done to make those three power plants  
8 among the cleanest-burning power plants in the country.

9           The Bull Run plant, as the Court has heard, already  
10 has a scrubber -- excuse me -- an SCR, the top-of-the-line  
11 NOx control. The scrubber is slated to come on line this  
12 fall. When those two work together, the Bull Run plant will  
13 have the best mercury co-benefit controls available.

14           The Kingston plant has nine units. All nine are  
15 already equipped with SCRs. The scrubber, that project is  
16 over 70 percent complete. The scrubbers for all nine units  
17 are expected to be on line by 2010. When the scrubbers come  
18 on line, it will have the best mercury co-benefits available.

19           John Sevier, it's not as far along. There is, in  
20 fact, an empty field right there. But there is engineering  
21 work going on, there's design work going on, there is  
22 procurement work going on. And this John Sevier plant is  
23 putting in SNCRs right now for NOx control; it's putting in a  
24 scrubber for sulfur dioxide control, which is expected to be  
25 in by 2012; and then as soon as it gets in, they can take out



1 one of the other things and that makes room to put in the  
2 SCR, and when that SCR and scrubber are on together, expected  
3 to be no later than 2014 for the SCR, John Sevier will have  
4 the best mercury co-benefit controls in the country.

5           That means that these three plants, the ones  
6 closest to North Carolina, the ones closest to the Smokies,  
7 are being controlled in the best possible way, and that is  
8 being paid for by all of these people who live over here,  
9 Your Honor. One and a half billion dollars or more those  
10 people are putting into these plants that are closest to  
11 North Carolina. That's more -- that's as much money as Duke  
12 Energy is spending on all the pollution controls it's putting  
13 on in the whole state of North Carolina. That's about the  
14 amount of money that Progress Energy is spending on all the  
15 pollution controls it's putting in the whole state of North  
16 Carolina.

17           If, as Mr. Gulick says, North Carolina has a fair  
18 and reasonable demand to make of TVA, that demand is that TVA  
19 control these plants, and that is exactly what TVA is doing.

20           Even Dr. Staudt, who wouldn't admit anything I  
21 wanted him to admit, even he testified that when these plants  
22 are controlled they'll be operating at better than reasonable  
23 emission rates.

24           But how do we know that's going to happen? How do  
25 we know TVA is going to follow through and do those things

1 that it has said? How do we know that North Carolina isn't  
2 going to have to come back to this court and ask for  
3 assistance a few years from now?

4           We know that, Your Honor, because Tom Kilgore, the  
5 CEO, the president of TVA, sat in that witness chair, took  
6 the oath, and he assured this Court and he assured North  
7 Carolina that TVA is committed to doing these things. It  
8 isn't true that TVA only does things when it's sued, but sued  
9 or not, TVA has made the commitment to do these things and  
10 provide major benefits to the state of North Carolina. And  
11 when TVA finishes those projects, when those plants are the  
12 cleanest burning plants in the country, providing benefits to  
13 North Carolina, we really hope that Secretary Ross will say  
14 to us the same thing he said to us when we told him about  
15 this before suit was ever filed: Congratulations.

16           We ask that this case be dismissed, Your Honor.

17           **MR. GULICK:** Your Honor, the first thing I would  
18 like to say is that the -- it is highly relevant to this case  
19 that there is not only a nuisance occurring in North Carolina  
20 but a nuisance occurring in the states whose law controls;  
21 Tennessee, Alabama and Kentucky. It is the law of those  
22 states that controls, and if TVA is creating a nuisance in  
23 those states, that is highly relevant to the question of  
24 whether TVA is liable for the nuisance it's creating in North  
25 Carolina as well.

1           The evidence establishes very clearly that there  
2 are impacts right now. This comes from the modeling from  
3 TVA's emissions.

4           I'd like to draw your attention again to  
5 Dr. Anderson's Exhibit 5A, which showed what she said was  
6 current, although it was 2002. It shows emissions from  
7 TVA's -- that was attached to her -- that was part of her  
8 report. Her exhibit showed that TVA's emissions from each  
9 state, from Alabama, separately from Kentucky, separately  
10 from Tennessee, impact every county in the state of North  
11 Carolina. It's very true. In fact, greater in western North  
12 Carolina. And that's where most of the evidence that we  
13 presented about North Carolina harms come from. But the  
14 Court should not ignore the fact that the USEPA, when it did  
15 its CAIR modeling with respect to Catawba and Davidson  
16 Counties, that modeling, which is in evidence, establishes  
17 very clearly that the majority of the impacts that are  
18 occurring in Catawba and Davidson County of particulate  
19 matter come from out of state. Certainly, North Carolina's  
20 contribution in 2010, which was the date that it was using,  
21 are more than those from any other single state, but in  
22 Catawba County, TVA -- excuse me -- Tennessee's contribution  
23 was two-thirds of that of North Carolina. And as you heard  
24 in the testimony, TVA emits 72 percent of the SO2 that's  
25 emitted. If they contribute, they're part of the problem,

1 and they have to be part of the solution.

2           North Carolina is dealing with its utilities, which  
3 SAMI -- and TVA would like to distance itself from SAMI. But  
4 SAMI, which Neil Wheeler testified had been confirmed by  
5 VISTAS, a later model in which TVA's modelers and TVA are  
6 also involved, confirm those SAMI results, and they show that  
7 there are significant contributions to western North Carolina  
8 coming from Kentucky, coming from Alabama, as well as from  
9 Tennessee, and that the emissions of sulfur dioxide in  
10 Tennessee had the biggest impact in all of the Class I areas  
11 in western North Carolina. That is modeling that was done  
12 back in 2002 or earlier.

13           So this is not just about the future. TVA would  
14 have it so, so that they can try to show that it's  
15 indistinguishable from the remedy that North Carolina seeks.

16           Nor is it the case that their conduct has been  
17 steady. As I have showed, TVA has responded -- and Mr. Myers  
18 has admitted -- TVA responded to legal pressure for legal  
19 requirements in every case. Mr. Kilgore here yesterday sat  
20 and said that TVA was not going to abandon its Bull Run, its  
21 Kingston, or John Sevier plants, but his personal promise is  
22 not a requirement. Who knows how long Mr. Kilgore will be  
23 with the TVA? Maybe it will be a long and happy career  
24 there, but who knows. He's a chief executive, but chief  
25 executives do leave.

1           In addition, Mr. Kilgore admitted yesterday, that  
2 after substantial investment, TVA abandoned several nuclear  
3 facilities that it had made large construction on.

4           If the circumstances change, its priorities could  
5 change. If the pressure is off, other priorities may take  
6 effect.

7           TVA, unlike Duke and Progress, is in charge of its  
8 own rates. Exactly how it decides to do that is up to it.  
9 Duke and Progress have already filed for rate increases after  
10 the end of the five-year -- this is already in evidence, I  
11 believe -- after the five-year freeze that was provided -- on  
12 rates that was provided under the Clean Smokestacks Act.

13           So the people of the state of North Carolina are  
14 going to pay, either in the frozen rates or otherwise, for  
15 the reductions that are being made by Duke and Progress to  
16 privately-owned utilities.

17           With regard to the NSR violations, there was a  
18 thorough investigation by EPA. I want to point out once  
19 again that Mr. Park didn't deny the underlying violations; he  
20 denied that they had been found guilty of that.

21           The John Sevier plant has not been built fast  
22 enough. The SCRs that are promised are well after 2013. If  
23 they occur.

24           One thing that Mr. Lancaster has failed to note is  
25 that both Duke and Progress and TVA installed a significant

1 number of SCRs or other controls in order to meet the NOx SIP  
2 Call, which was a legal requirement that had an end date for  
3 performance of not years in advance, but in 2004. It  
4 required four years to install a very large number of SCRs  
5 and SNCRs. So that was not a voluntary effort on TVA's part  
6 or on Duke and Progress's part. That was the result of a  
7 legal requirement that actually had an end date, a legal  
8 requirement. That was during the Clinton administration.

9 Dr. Anderson, who up until about 20 years ago  
10 worked for EPA, would have you believe that the imperfectly  
11 created National Ambient Air Quality Standard that is  
12 supposed to be protective of human health with an adequate  
13 margin of safety is actually doing that. She wants you to  
14 presume that it's an effective threshold, as she said. But  
15 all of the scientific evidence, including the expert  
16 elicitation, which Dr. Moolgavkar poo-pooed -- but that  
17 expert elicitation of prominent scientists knowledgeable in  
18 this field, all but two believed -- only one of the  
19 scientists incorporated a threshold. Most of them thought  
20 there was no scientific, either factual or theoretical,  
21 grounds to assume that there was a threshold for the exposure  
22 to either sulfates -- excuse me -- to particulate matter or  
23 to ozone. I'm sorry. The elicitation had to do with  
24 particulate matter exposure. They found no theoretical or  
25 factual basis to assume a threshold. But Dr. Anderson and

1 Dr. Moolgavkar, whose career in the last ten years has been  
2 associated with representing their industry clients, would  
3 have you believe that the NAAQS, imperfectly created and  
4 certainly imperfectly administered by EPA and by its  
5 administrator and political appointee, they would have you  
6 believe that that is actually not there to protect the public  
7 with an adequate margin of safety but to protect industry  
8 from having to install pollution controls.

9           The SAMI program fixes knowledge on TVA about its  
10 contribution to the harm in western North Carolina's air  
11 pollution. The later modeling has not undermined SAMI. It  
12 has confirmed it. It would have you -- TVA would have you  
13 ignore the modeling done by Mr. Chinkin and Mr. Wheeler,  
14 using the very same modeling techniques that were used by  
15 Mr. Tesche and Mr. Mueller, which establishes significant  
16 pollution in western North Carolina.

17           If you will look at Mr. Tesche's somewhat truncated  
18 maps of the United States, you will see that even his own --  
19 even his own exhibits show impacts in western North Carolina  
20 and in Kentucky and in Tennessee and in Alabama.

21           Your Honor, the evidence before you shows that TVA is  
22 engaging in a current nuisance. Their promises may be well  
23 and good, but what the evidence also shows is that it is  
24 legal requirements that actually cause things to happen and  
25 cause them to happen by a definite date, and the date that we

1 have chosen is one that is achievable for them. But a date  
2 certain is what it takes to have these things happen. And we  
3 ask that you enter judgment for the State of North Carolina  
4 and require reductions on a fixed time table for a fixed  
5 amount of reduction.

6 Thank you.

7 **THE COURT:** Mr. Lancaster?

8 **MR. LANCASTER:** I have nothing further to add  
9 unless the Court has a question.

10 **THE COURT:** I don't believe I do.

11 So I believe we agreed that by mid September, the  
12 parties would have till the 15th to submit --

13 **MR. LANCASTER:** Yes, sir. And we appreciate the  
14 accommodation for our schedule.

15 **THE COURT:** That will give us an opportunity to  
16 look further at what your positions are and a final analysis.

17 I want to thank all of you for what I consider to  
18 be exemplary conduct during the course of this trial. A lot  
19 of my trials don't go this smoothly. You've all been ladies  
20 and gentlemen, and I appreciate it.

21 So I'll look forward to hearing from you by the  
22 15th of September. And with the thanks of the Court, court  
23 may be adjourned until further call.

24 **(End of proceedings.)**

25 **[END OF VOLUME 12]**



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UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF NORTH CAROLINA  
CERTIFICATE OF REPORTER

I certify that the foregoing transcript is a  
true and correct transcript from the record of proceedings  
in the above-entitled matter.

Dated this 2nd day of August, 2008.

S/ Karen H. Miller  
\_\_\_\_\_  
Karen H. Miller, RMR-CRR  
Official Court Reporter